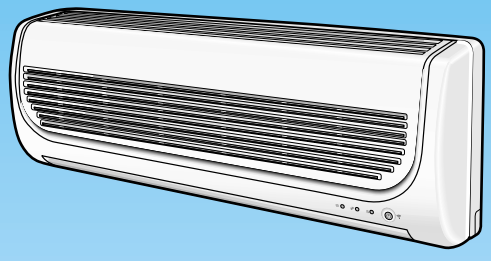
SAMSUNG

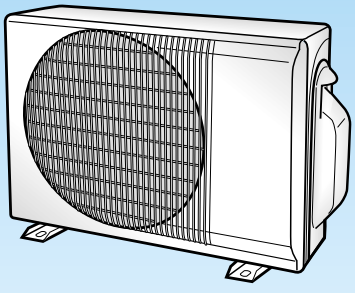
ROOM AIR CONDITIONER

SH05ZZ8
SH07ZZ8
SC05ZZ8
AS05Z1AZD
AS07Z1AZD

SERVICE *Manual*

AIR CONDITIONER





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1. Product Specifications

1-1 Heat Pump

Item \ Model					SH05ZZ8		SH07ZZ8	
					Indoor unit	Outdoor unit	Indoor unit	Outdoor unit
Type					Wall-mounted		Wall-mounted	
Perfor-mance	Cooling			BTU/h	5,000		7,000	
	Heating			BTU/h	5,000		7,500	
	Dehumidifying			ℓ/h	0.9		1.0	
	Air Volume	Cooling		m^3/min	4.3	19	5.2	19
		Heating			4.5	19	5.4	19
	Noise	Cooling		dB	33	48	37	49
		Heating			33	48	37	49
	Energy Efficiency Ratio	Cooling		BTU/W	10.2		10.5	
		Heating			10.8		11.6	
	Power			V-Hz	1-220 / 240-50		1-220 / 240-50	
Power	Power Consumption	Cooling		W	490		680	
		Heating			460		650	
	Operating Current	Cooling		A	2.3		3.0	
		Heating			2.2		2.8	
	Power Factor	Cooling		%	92.6		98.5	
		Heating			90.9		100.9	
	Starting Current			A	17.0		17.0	
	Power Cord	Length		m	-		-	
		Number of Core Wire			-		-	
		Capacity		A	250V-10 / 16A		250V-10 / 16A	
Size	Outer Dimension	Width x Height x Depth		mm	728x255x155	660x470x240	728x255x155	660x470x240
				inch	28.6x10.0x6.1	26.0x18.5x9.5	28.6x10.0x6.1	26.0x18.5x9.5
	Weight(Net)			kg	7	25.5	7	25.5
	Refrigerant Pipe	Liquid		mm x L(m)	ø6.35 x 5		ø6.35 x 5	
		GAS		mm x L(m)	ø9.52 x 5		ø9.52 x 5	
	Drain Hose			D x L(mm)	ø18 x 2,000		ø18 x 2,000	
	Compressor	Type			Rotary		Rotary	
		Motor	Type		-	-	-	-
			Rated Output		-	-	-	-
	Blower	Type			Cross-flow	Propeller	Cross-flow	Propeller
		Motor	Type		steel	steel	steel	steel
			Rated Output	W	11	20	11	20
Heat Exchanger					2ROW 10STEP	1ROW 20STEP	2ROW 10STEP	1ROW 20STEP
Refrigerant Control Unit					CAPILLARY TUBE		CAPILLARY TUBE	
Freezer Oil Capacity				cc	360		290	
Refrigerant to Change(R22)				g	460		510	
Protection Device(OLP)					RAC12051-1208		MRA99137-9201	
Cooling Test Condition					INDOOR UNIT : DB27˚C WB19˚C		OUTDOOR UNIT : DB35˚C WB24˚C	
Maximum Operation Condition					INDOOR UNIT : DB32˚C WB23˚C		OUTDOOR UNIT : DB43˚C WB26˚C	

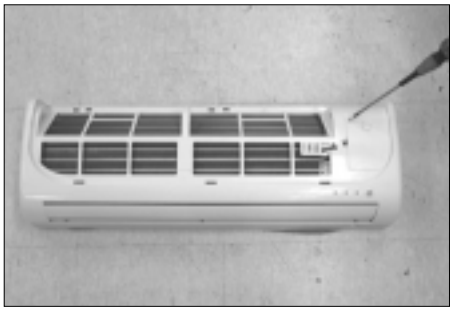
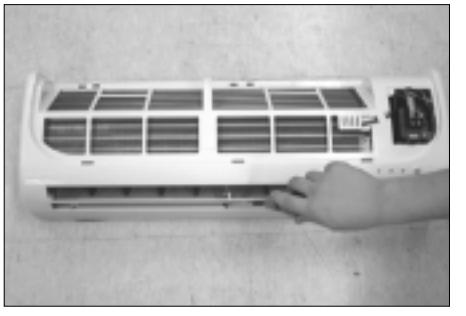
1-2 Cooling Only

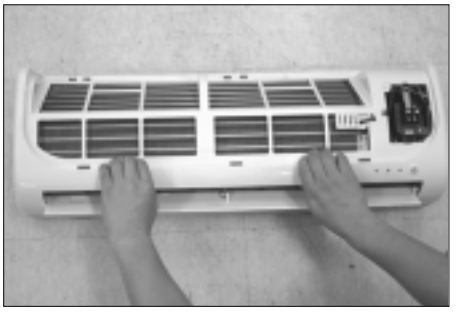
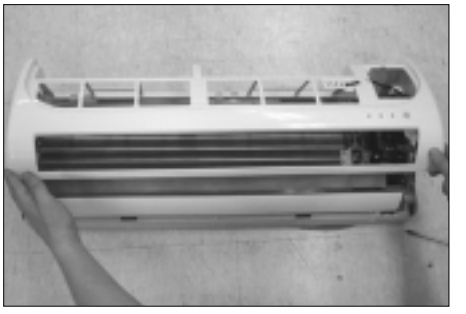
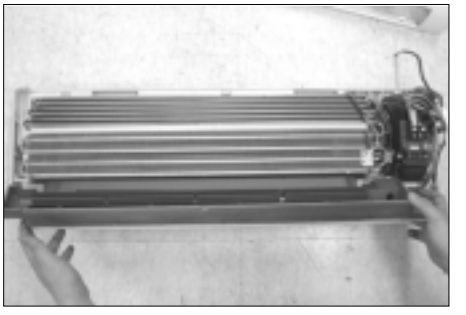
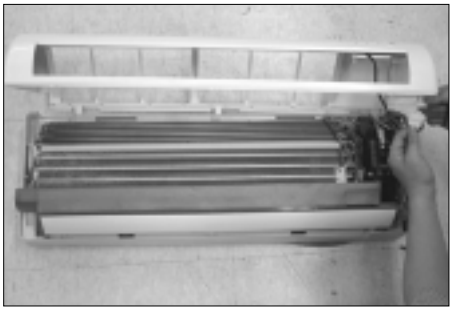
Item				Model	SC05ZZ8		AS05Z1AZD		AS07Z1AZD	
					Indoor unit	Outdoor unit	Indoor unit	Outdoor unit	Indoor unit	Outdoor unit
Type					Wall-mounted		Wall-mounted		Wall-mounted	
Perfor-mance	Cooling			BTU/h	5,000		5,000		7,000	
	Dehumidifying			ℓ/h	0.9		0.9		1.0	
	Air Volume	Cooling		m^3/min	4.3	19	4.3	19	5.2	19
	Noise	Cooling		dB	33	48	33	48	37	49
	Energy Efficiency Ratio	Cooling		BTU/W	10		11.3		11.8	
	Power			V-Hz	1-220 / 240-50		1-200 / 220-50		1-200 / 220-50	
Power	Power Consumption	Cooling		W	490		440		590	
	Operating Current	Cooling		A	2.2		2.2		3	
	Power Factor	Cooling		%	98.8		90.9		89.4	
	Starting Current			A	17.0		16.5		16.5	
	Power Cord	Length		m	-		-		-	
		Number of Core Wire			-		-		-	
		Capacity		A	250V-10 / 16A		250V-10 / 16A		250V-10 / 16A	
Size	Outer Dimension	Width x Height x Depth		mm	728x255x155	660x470x240	728x255x155	660x470x240	728x255x155	660x470x240
				inch	28.6x10.0x6.1	26.0x18.5x9.5	28.6x10.0x6.1	26.0x18.5x9.5	28.6x10.0x6.1	26.0x18.5x9.5
	Weight(Net)			kg	7	24.5	7	24.5	7	24.5
	Refrigerant Pipe	Liquid		mm x L(m)	ø6.35 x 5		ø6.35 x 5		ø6.35 x 5	
		GAS		mm x L(m)	ø9.52 x 5		ø9.52 x 5		ø9.52 x 5	
	Drain Hose			D x L(mm)	ø18 x 2,000		ø18 x 2,000		ø18 x 2,000	
	Compressor	Type			Rotary		Rotary		Rotary	
		Motor	Type		-	-	-	-	-	-
			Rated Output		-	-	-	-	-	-
	Blower	Type			Cross-flow	Propeller	Cross-flow	Propeller	Cross-flow	Propeller
		Motor	Type		steel	steel	steel	steel	steel	steel
			Rated Output	W	11	20	11	20	11	20
Heat Exchanger					2ROW 10STEP	1ROW 20STEP	2ROW 10STEP	1ROW 20STEP	2ROW 10STEP	1ROW 20STEP
Refrigerant Control Unit					CAPILLARY TUBE		CAPILLARY TUBE		CAPILLARY TUBE	
Freezer Oil Capacity				cc	360		360		360	
Refrigerant to Change(R22)				g	440		380		400	
Protection Device(OLP)					RAC12051-1208		RAC12074-9622		RAC12074-9622	
Cooling Test Condition					INDOOR UNIT : DB27˚C WB19˚C		OUTDOOR UNIT : DB35˚C WB24˚C			
Maximum Operation Condition					INDOOR UNIT : DB32˚C WB23˚C		OUTDOOR UNIT : DB43˚C WB26˚C			

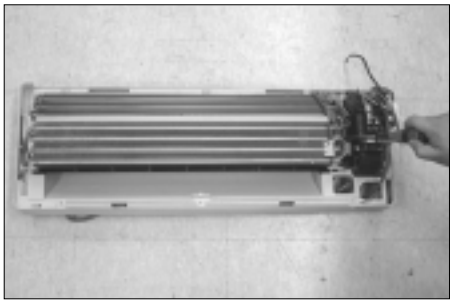
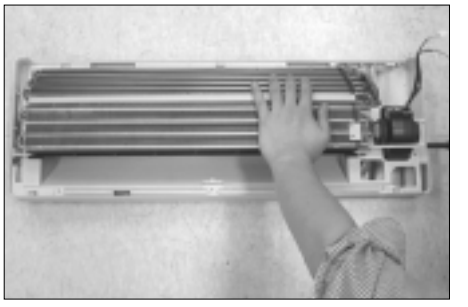
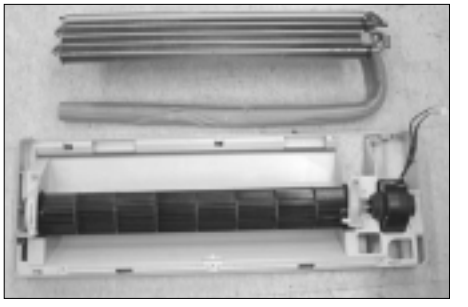
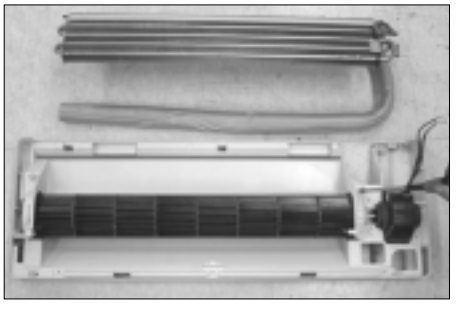
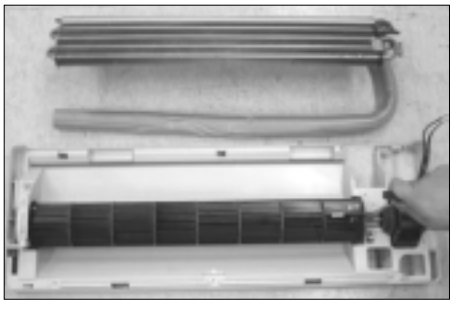
2. Disassembly and Reassembly

Stop operation of the air conditioner and remove the power cord before repairing the unit.

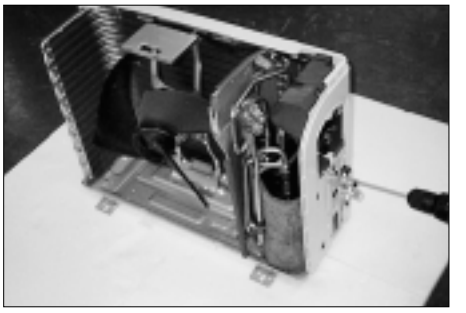
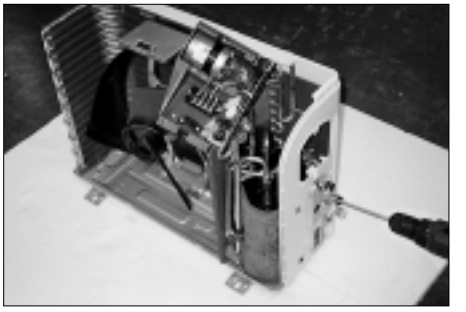
2-1 Indoor Unit

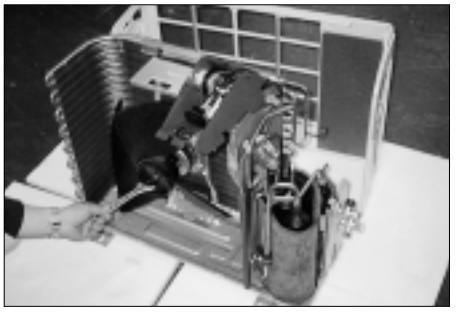
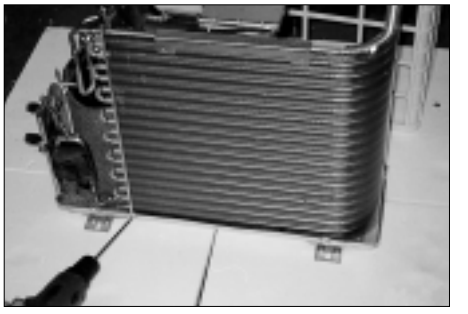
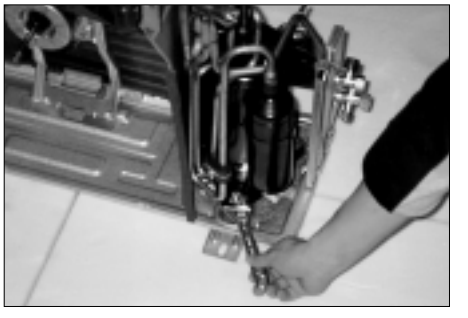
No	Parts	Procedure	Remark
1	Front Grille	1) Stop the air conditioner operation and block the main power. 2) Detach tape of Grille Air-Inlet.	
		3) After Both End Part of the Grille Lower Position are pressing, it shall be detach by pushing up.	
		4) Loosen 1 of the right screw and detach the Terminal Cover. 5) Detach the thermistor from the Front Grille.	
		6) Loosen 3 fixing screws of Front Panel.	

No	Parts	Procedure	Remark
		7) Pull the lower left and right of discharge softly for the outside cover to be pulled out.	
		8) In order to disassemble the Panel Front press, in order, the left, center and right of the upper side of the Panel Grille with the plam of the hand to remove the hook. And then disassemble the Panel Grille.	
2	Tray Drain	1) Pull Tray Drain out from the Back Body.	
3	Electrical Parts (Main PCB)	1) Take all the connector of PCB upper side out. (Inclusion Power Cord) 2) Detach the outdoor unit connection wire from the Terminal Block. 3) If pulling the main PCB up, it will be taken out.	

No	Parts	Procedure	Remark
4	Heat Exchanger	1) Loosen 2 fixing earth screws of right side. 2) Detach the Connection Pipe. 3) Detach the Holder Pipe at the rear side. 4) Loosen the 2 fixing screws of right and left side. 5) Lifting the Heat Exchanger up a little to push the up side for separation from the indoor unit.	  
5	Fan Motor & Cross Fan	1) Loosen the 4 fixing screws and detach the Motor Holder. 2) Loosen the fixing screw of Fan Motor. (with a M3 wrench) 3) Detach the Fan Motor from the Fan. 4) Detach the Fan from the left Holder Bearing.	 

2-2 Outdoor Unit

No	Parts	Procedure	Remark
1	Common Work	1) Loosen 2 fixing screws and detach the Cover Terminal.	
		2) Loosen 2 fixing screws and detach the Cover Control. 3) Detach the connection wire from the Terminal Block.	
		4) Loosen 6 fixing screws and detach the Cabinet-Front.	
		5) Loosen 1 fixing screw of Ass'y E-part.	
		6) Loosen 12 fixing screws and detach the Cabinet-Side.	

No	Parts	Procedure	Remark
2	Fan & Motor	1) Remove the Nut Flange. (Turn to the clockwise) 2) Detach the Fan.	
		3) Loosen 4 fixing screws to detach the Motor. 4) Loosen 2 fixing screws and detach the Motor Bracket from the Base.	
3	Heat Exchanger	1) Loosen 2 fixing screws of left and right side. 2) Disassemble the inlet and outlet pipe by welding. 3) Detach the Heat Exchanger.	
4	Compressor	1) Open the Terminal Cover of Compressor and unscrew the Connection Terminal. 2) Disassemble the inlet and outlet pipe of Compressor by Welding. 3) Loosen 3 bolts of the lower part. 4) Detach the Compressor.	 

3. Set Up the Model Option

3-1 Setting Option Setup Method

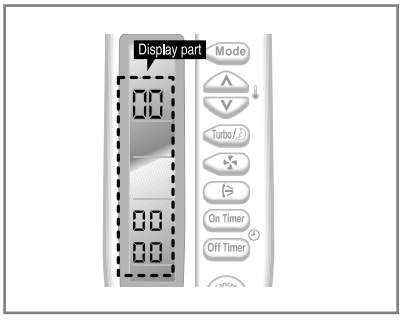
ex) Option No. : 005024-1 70360

Step 1 : **Enter the Option Setup mode.**

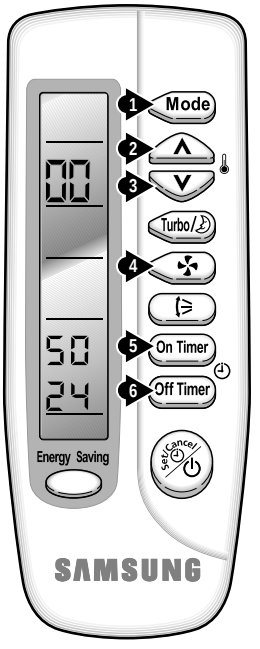
1st Take out the batteries of remote control.

2nd Press the temperature button simultaneously and insert the battery again.

3rd Make sure the remocon display shown as 00 00 00 .



Step 2 : **Enter the Option Setup mode and select your option according to the following procedure.**



✻ Setting is not required if you must 0 a value which has a 0 default.

1

The default value is 00 00 00 .
Otherwise, push the Mode button to 0 .
Every time you push the button, the display panel reads 1 or 0 repeatedly.

2

Do not touch the button because its default is 0 .
Unless the display panel reads 0 , push the button to 0 .

3

Push the button to set the display panel to 5 .
Every time you push the button, the display panel reads 0 ➡ 1 ➡ 2 ➡ 3 ➡ · · · 9 ➡ A ➡ b ➡ c ➡ d ➡ E ➡ F repeatedly.

4

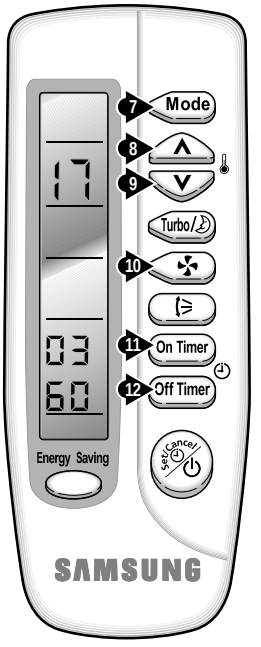
Do not touch the button because its default is 0 .
Unless the display panel reads 0 , push the button to 0 .

5

Push the On Timer button to set the display panel to 2 .
Every time you push the button, the display panel reads 0 ➡ 1 ➡ 2 ➡ 3 ➡ · · · 9 ➡ A ➡ b ➡ c ➡ d ➡ E ➡ F repeatedly.

6

Push the Off Timer button to set the display panel to 4 .
Every time you push the button, the display panel reads 0 ➡ 1 ➡ 2 ➡ 3 ➡ · · · 9 ➡ A ➡ b ➡ c ➡ d ➡ E ➡ F repeatedly.



✻ Setting is not required if you must a value which has a default.

7 Press Mode button, then the default value is .

8 Push the button to set the display panel to .
Every time you push the button, the display panel reads → → → → repeatedly.

9 Do not touch the button because its default is .
Unless the display panel reads , push the button to .

10 Push the button to set the display panel to .
Every time you push the button, the display panel reads → → → → repeatedly.

11 Push the On Timer button to set the display panel to .
Every time you push the button, the display panel reads → → → → repeatedly.

12 Do not touch the Off Timer button because its default is .
Unless the display panel reads , push the Off Timer button to .

Step 3 : Upon completion of the selection, check you made right selections.

Press the Mode Selection key, Mode to set the display part to and check the display part.

→ The display part shows .

Press the Mode Selection key, Mode to set the display part to and check the display part.

→ The display part shows .

Step 4 : Press the ON/OFF button ( )

When pressing the operation ON/OFF key with the direction of remote controller for unit, the sound "Ding" or "Diriring" is heard and the OPERATION ICON(≋) lamp of the display is flickering at the same time, then the input of option is completed. (If the diriring sound isn't heard, try again pressing the ON/OFF button.)

Step 5 : Unit operation test-run

First, Remove the battery from the remote controller.

Second, Re-insert the battery into the remote controller.

Third, Press ON/OFF key with the direction of remote controller for set.

• Error Mode

1st If all lamps of indoor unit are flickering, Plug out, plug in again and press ON/OFF key to retry.

2nd If the unit is not working properly or all lamps are continuously flickering after setting the option code, see if the correct option code is set up for its model.

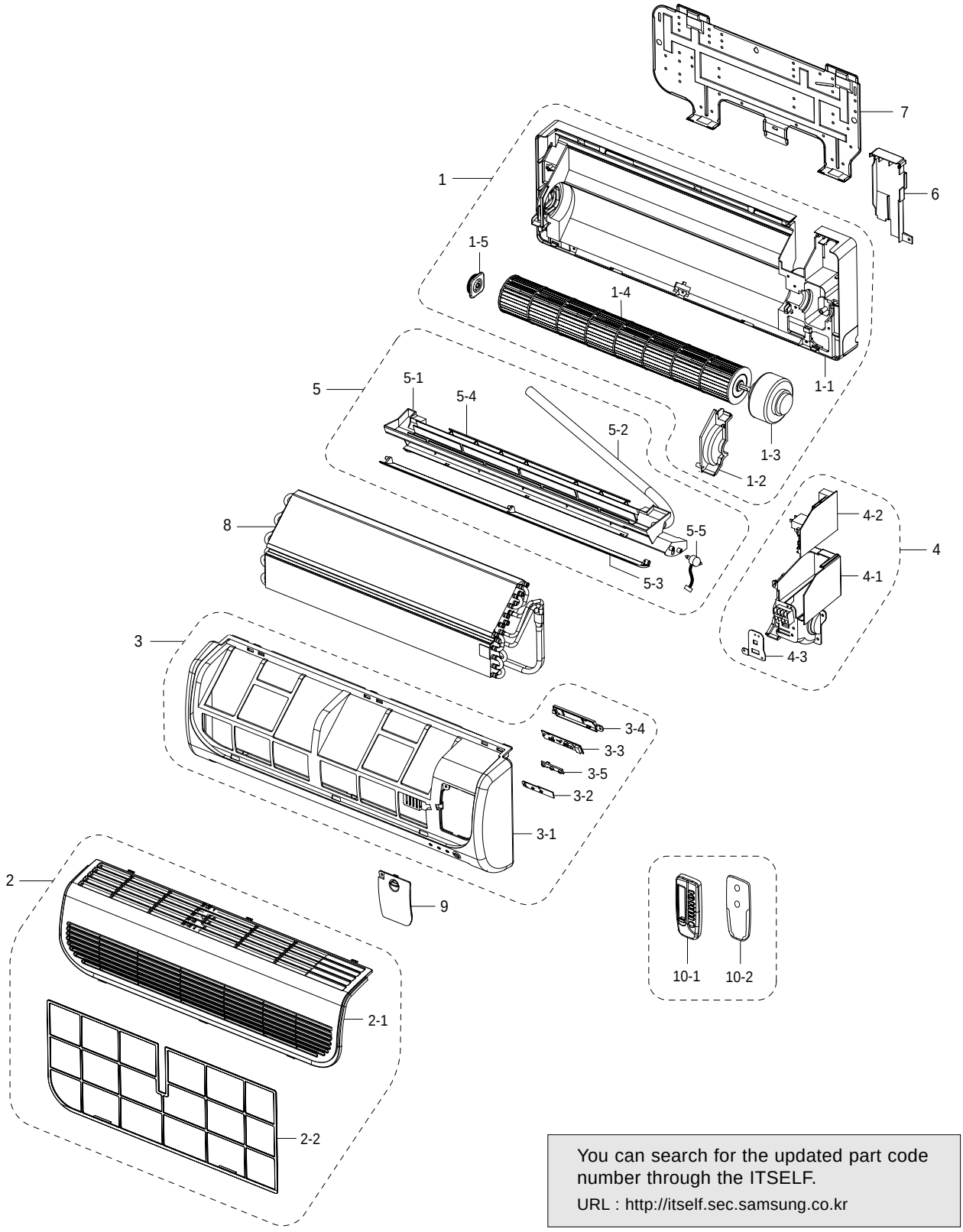
■ OPTION ITEMS

REMOCON / MODEL	SEG1	SEG2	SEG3	SEG4	SEG5	SEG6	SEG7	SEG8	SEG9	SEG10	SEG11	SEG12
SH05ZZ8	0	0	5	0	2	5	1	7	0	2	1	d
SH07ZZ8	0	0	5	0	2	4	1	7	0	3	6	0
SC05ZZ8	0	0	0	0	0	0	1	7	0	2	1	d
AS05Z1AZD	0	0	0	0	0	0	1	7	0	2	1	d
AS07Z1AZD	0	0	0	0	0	0	1	7	0	2	1	d

MEMO

4. Exploded Views and Parts List

4-1 Indoor Unit



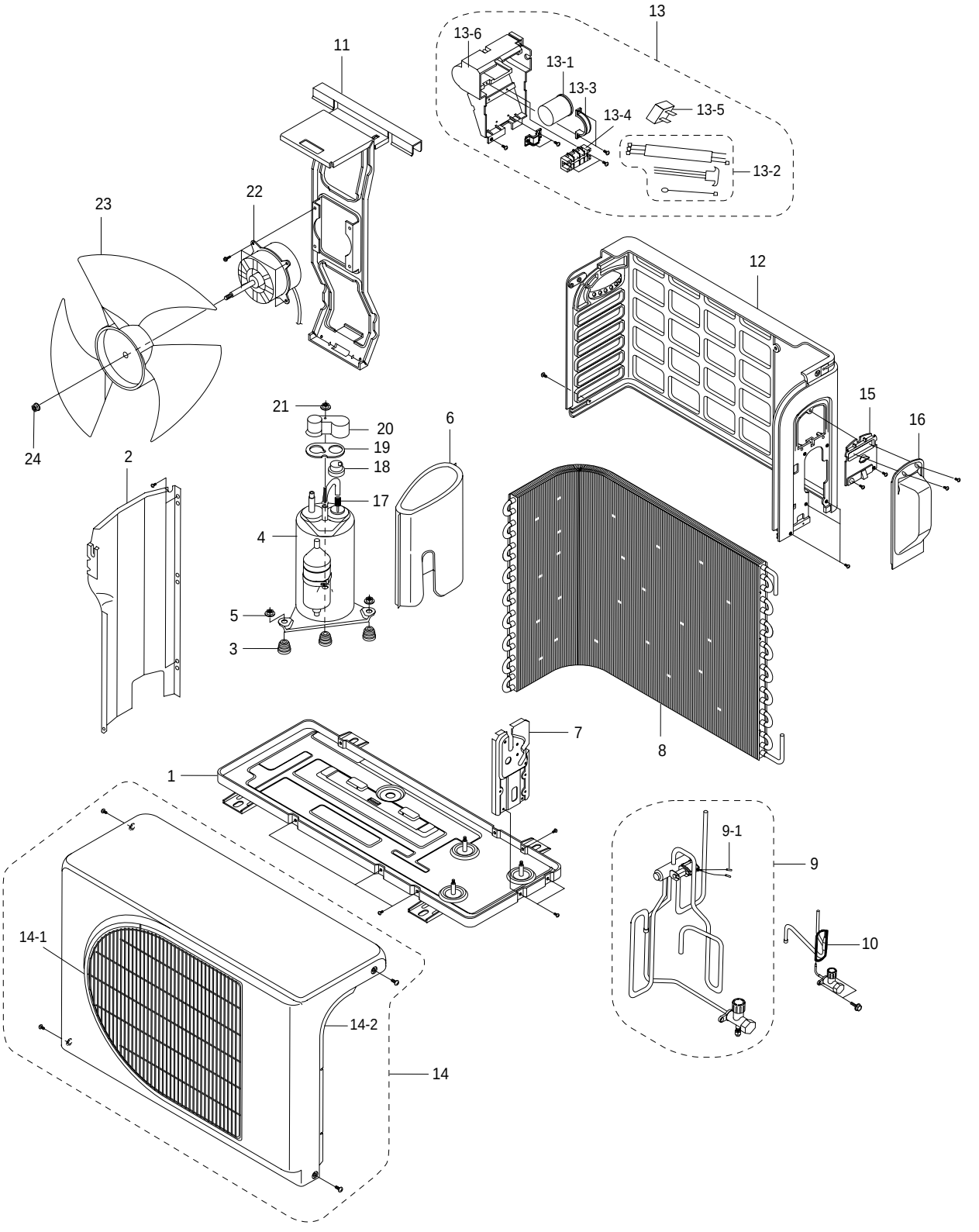
You can search for the updated part code number through the ITSELF.

URL : http://itself.sec.samsung.co.kr

■ **Parts List**

No.	Code No.	Description	Specification	Q'TY		
				SH05ZZ8 SH07ZZ8	SC05ZZ8	AS05(07)Z1AZD
1	DB94-00434A	ASS'Y BACK BODY	ASS'Y	1	1	1
1-1	DB61-01660A	BACK BODY	HIPS	1	1	1
1-2	DB61-01655A	HOLDER MOTOR	PP(V0)	1	1	1
1-3	DB31-00152A	MOTOR FAN IN	ASS'Y	1	1	1
1-4	DB94-00436A	CROSS FAN	ASS'Y	1	1	1
1-5	DB94-00258A	RUBBER BERARING	RUBBER	1	1	1
2	DB92-00527A	ASS'Y GRILLE	ASS'Y	1	1	1
2-1	DB64-01005A	GRILLE AIR INLET	HIPS	1	1	1
2-2	DB63-00870A	GUARD AIR FILTER	PP	1	1	-
	DB63-00870B	GUARD AIR FILTER	PP	-	-	1
3	DB92-00528A	ASS'Y PANEL FRONT	ASS'Y	1	1	1
3-1	DB64-01004A	PANEL FRONT	HIPS	1	1	1
3-2	DB63-00866A	COVER DISPLAY	PC	1	1	1
3-3	DB93-02534A	ASS'Y DISPLAY PCB	ASS'Y	1	1	1
3-4	DB63-00865A	COVER DISPLAY PCB	HIPS	1	1	1
3-5	DB61-01657A	HOLDER LED	HIPS	1	1	1
4	DB93-02513A	ASS'Y CONTROL IN	ASS'Y	1	-	-
	DB93-02513B	ASS'Y CONTROL IN	ASS'Y	-	1	1
4-1	DB61-01656A	HOLDER CONTROL	HIPS(V0)	1	1	1
4-2	DB93-02617A	ASS'Y MAIN PCB	ASS'Y	1	-	-
	DB93-02617B	ASS'Y MAIN PCB	ASS'Y	-	1	1
4-3	DB62-01661A	HOLDER CLAMP IN	SGCC-M	1	1	1
5	DB94-00314A	ASS'Y TRAY DRAIN	ASS'Y	1	1	1
5-1	DB63-00869A	TRAY DRAIN	ABS	1	1	1
5-2	DB94-00315Q	DRAIN HOSE	ASS'Y	1	1	1
5-3	DB66-00606A	BLADE-H	HIPS	1	1	1
5-4	DB66-00605A	BLADE-V	PP	1	1	1
5-5	DB95-20138A	MOTOR STEPPING	ASS'Y	1	1	1
6	DB61-01658A	HOLDER PIPE	HIPS	1	1	1
7	DB70-00426A	PLATE HANGER	SGCC-M	1	1	1
8	DB96-03063A	ASS'Y EVAP UNIT	ASS'Y	1	1	1
9	DB63-00867A	COVER TERMINAL	HIPS(V0)	1	1	1
10-1	DB93-01364B	REMOCON	ASS'Y	1	-	-
	DB93-01364A	REMOCON	ASS'Y	-	1	1
10-2	DB61-00204A	REMOCON HOLDER	HIPS	1	1	1

4-2 Outdoor Unit

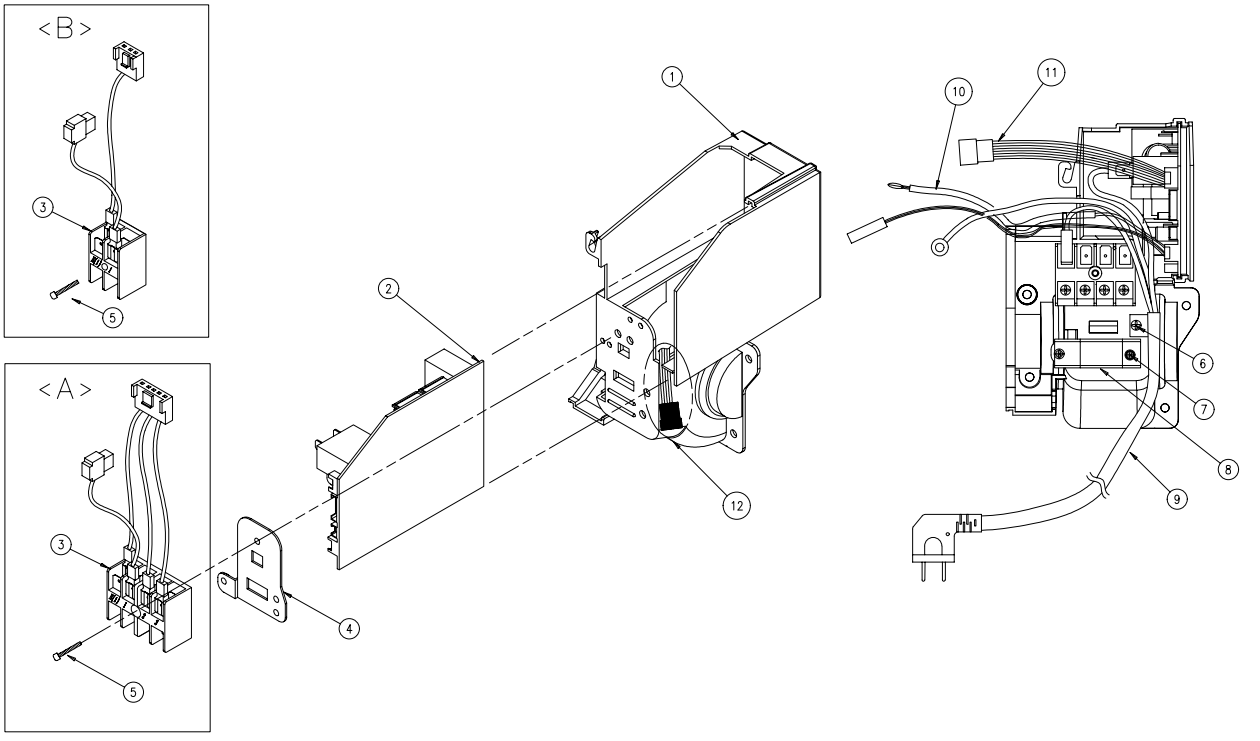


■ **Parts List**

No.	Code No.	Description	Q'TY				
			SH05ZZ8X	SH07ZZ8X	SC05ZZ8X	AS05Z1AZDX	AS07Z1AZDX
1	DB90-01241A	ASS'Y BASE OUT	1	-	1	1	-
	DB90-01241B	ASS'Y BASE OUT	-	1	-	-	1
2	DB94-00045B	ASS'Y PARTITION	1	1	1	1	1
3	DB73-00070A	GROMMET ISLOATOR	1	-	1	1	-
	DB63-00930A	GROMMET ISLOATOR	-	1	-	-	1
4	DB95-00094H	ROTARY COMP	1	-	1	-	-
	DB95-00476A	ROTARY COMP	-	1	-	-	1
	DB95-00532A	ROTARY COMP	-	-	-	1	-
5	DB60-30028A	NUT WASHER	1	1	1	1	1
6	DB72-00727A	CLOTH COMP SOUND	1	1	1	1	1
7	DB61-00168A	BRAKET VALVE	1	1	1	1	1
8	DB96-02994A	ASS'Y CONDENSER	1	-	-	-	-
	DB96-02994B	ASS'Y CONDENSER	-	1	-	-	-
	DB96-02994C	ASS'Y CONDENSER	-	-	1	1	1
9	DB99-00398A	ASS'Y 4WAY VALVE	1	-	-	-	-
	DB99-00379A	ASS'Y 4WAY VALVE	-	1	-	-	-
9-1	DB33-00002A	ASS'Y SOLENOID COIL	1	1	-	-	-
10	DB96-02989B	ASS'Y TUBE CAPILLARY	1	-	1	-	-
	DB96-02989A	ASS'Y TUBE CAPILLARY	-	1	-	-	-
	DB96-02989E	ASS'Y TUBE CAPILLARY	-	-	-	1	1
11	DB90-01287A	ASS'Y BRACKET MOTOR	1	1	1	1	1
12	DB90-00109B	ASS'Y CABI SIDE	1	1	1	1	1
13	DB93-02608A	ASS'Y CONTROL OUT	-	-	1	-	-
	DB93-02565A	ASS'Y CONTROL OUT	-	1	-	-	-
	DB93-02565B	ASS'Y CONTROL OUT	1	-	-	-	-
	DB93-02608B	ASS'Y CONTROL OUT	-	-	-	-	1
	DB93-02608C	ASS'Y CONTROL OUT	-	-	-	1	-
13-1	2501-001235	C OIL	1	-	1	-	-
	2501-001234	C OIL	-	1	-	1	1
13-2	DB93-00481A	ASS'Y LEAD WIRE	1	1	1	1	1
13-3	DB61-00172A	HOLDER CAPACITOR	1	1	1	1	1
13-4	DB65-40049E	TERMINAL BLOCK	1	1	1	1	1
13-5	2301-001375	C FILM	1	1	1	1	1
13-6	DB61-00170A	CASE CONTROL OUT	1	1	1	1	1
14	DB90-00109B	ASS'Y CABI FRONT	1	1	1	1	1
14-1	DB63-00099A	GUARD FAN WIRE	1	1	1	1	1
14-2	DB64-00086A	CABINET FRONT	1	1	1	1	1
15	DB90-00152A	ASS'Y COVER CONTROL	1	1	1	1	1
16	DB94-00021A	ASS'Y COVER VALVE	1	1	1	1	1
17	DB67-60020A	SPRING OLP	1	-	1	1	-
	DB61-01764A	SPRING OLP	-	1	-	-	1
18	DB35-00020F	PROTECTOR O/P	1	-	1	1	-
	DB35-00027A	PROTECTOR O/P	-	1	-	-	1
19	DB63-20002A	GASKET	1	-	1	1	-
	DB63-00931A	GASKET	-	1	-	-	1
20	DB63-10165D	COVER TERMINAL	1	-	1	1	-
	DB63-00928A	COVER TERMINAL	-	1	-	-	1
21	DB60-30018A	NUT FLANGE	1	-	1	1	-
	DB63-00968A	NUT FLANGE	-	1	-	-	1
22	DB31-00034A	MOTOR FAN OUT	1	1	1	1	1
23	DB67-00036A	FAN PROPELLER	1	1	1	1	1
24	DB60-30020A	NUT FLANGE	1	1	1	1	1

4-3 Ass'y-Control In

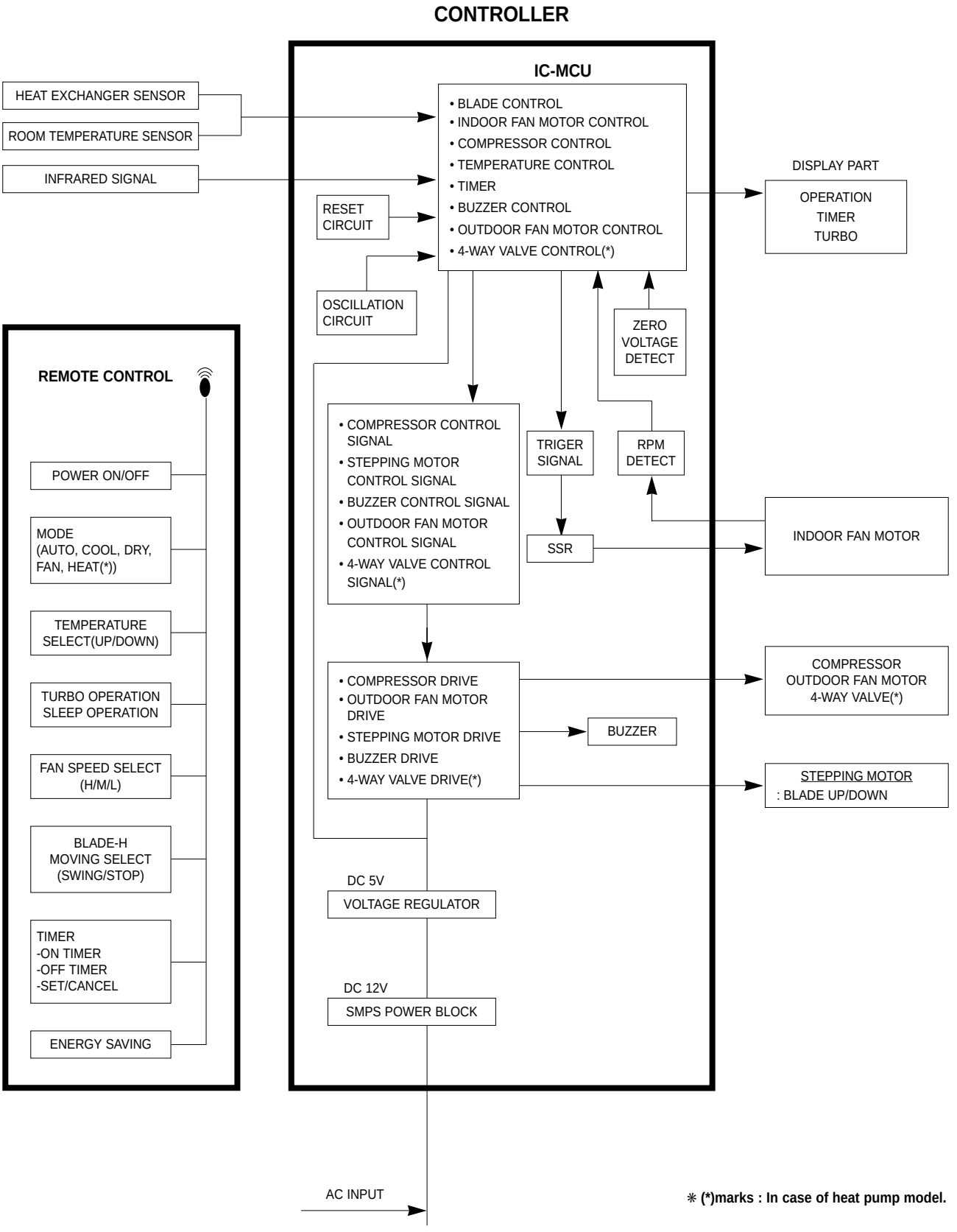
■ **DB93-02513A : SH05ZZ8/SH07ZZ8**
DB93-02513B : SC05ZZ8
DB93-02513C : AS05Z1AZD/AS07Z1AZD



■ **Parts List**

No.	Code No.			Description	Specification	Q'TY
	DB93-02513A	DB93-02513B	DB93-02513C			
	"A"Part	"B"Part	"B"Part			
1	DB61-01656A	DB61-01656A	DB61-01656A	CASE-CONTROL	HIPS	1
2	DB93-02617A	DB93-02617B	DB93-02617B	ASS'Y MAIN PCB	ASS'Y	1
3	DB93-02508A	DB93-02507A	DB93-02507A	ASS'Y TERMINAL BLOCK	ASS'Y	1
4	DB61-01661A	DB61-01661A	DB61-01661A	HOLDER CLAMP IN	SGCC-M T1.0	1
5	6001-000929	6001-000929	6001-000929	SCREW-MACHINE	PH M3xL22	1
6	6001-001054	6001-001054	6001-001054	SCREW-MACHINE	TH M4xL10	1
7	6001-000725	6001-000725	6001-000725	SCREW-MACHINE	TH M4xL16	2
8	DB61-00171A	DB61-00171A	DB61-00171A	CLAMP WIRE	ABS	1
9	3903-000095	3903-000095	DB93-01631A	POWER CORD	UCP2/KP2	1
10	DB32-00020A	DB32-00020A	DB32-00020A	ASS'Y-THERMISTOR	ASS'Y	1
11	DB93-02498A	DB93-02498A	DB93-02498A	ASS'Y-C/W SUB(MAIN)	ASS'Y	1
12	DB39-00147D	DB39-00147D	DB39-00147D	CONNECTOR PCB U/D	ASS'Y	1

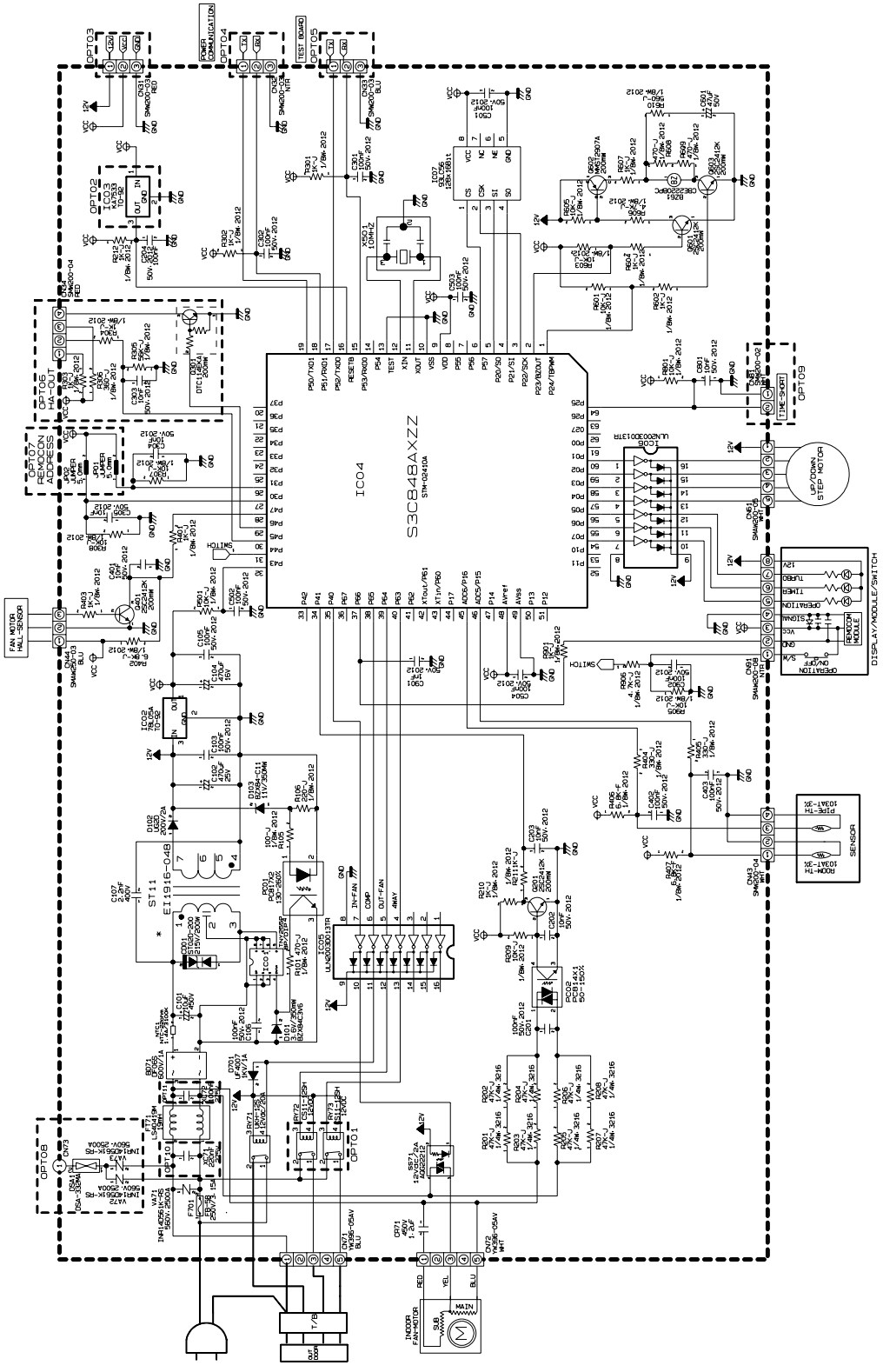
5. Block Diagram



✻ **(*)marks : In case of heat pump model.**

6. Schematic Diagram

6-1 Indoor Unit



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